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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,548	09/22/2003	Eikichi Suda	38323-193276	5550

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EXAMINER

TOTH, KAREN E

ART UNIT	PAPER NUMBER
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3735

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/666,548

Applicant(s)

SUDA, EIKICHI

Examiner

Karen E. Toth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/8/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-5 recite the limitation of extracting signals from the measured variations in the power supply voltage, which in the specification is further clarified as deriving a code from the variations. It is not clear what exactly is meant by a "code", nor is it clear what sort of variations are measured – whether it is merely the voltage being above or below a threshold, or if various voltage levels each trigger a different response. This is especially true for claims 12-14, since no explanation is provided as to how the supply incorporates some sort of digital code with the supplied voltage. As such, claims 12-14 will not be further examined on the merits, as it is not possible to formulate an accurate search.

Claim Rejections - 35 USC § 102

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Schulze (US Patent 6893396).

Regarding claim 1, Schulze discloses an electronic device for health index measurement (elements 12A, 12B) comprising a power supply connected to a power receiving section (column 3, lines 7-15); a voltage measuring section configured to measure a variation in the voltage of the power supplied to the power supply section (column 15, lines 20-25); a signal extracting section configured to analyze the measured voltage variation data and to extract a specific signal contained in the data (the signal being whether or not the voltage threshold is crossed, which can be considered to result in a 1/0 signal); and a control section configured to perform a specific control based on the signal extracted by the signal extracting section (column 15, lines 25-27).

Regarding claim 2, Schulze discloses an electronic device for health index measurement (elements 12A, 12B) comprising a power supply connected to a power receiving section (column 3, lines 7-15); a voltage measuring section configured to measure a variation in the voltage of the power supplied to the power supply section (column 15, lines 20-25); a signal extracting section configured to analyze the measured voltage variation data and to extract a

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specific signal contained in the data (the signal being whether or not the voltage threshold is crossed, which can be considered to result in a 1/0 signal); and a control section configured to perform a specific control based on the signal extracted by the signal extracting section (column 15, lines 25-27). Schulze further discloses a second control section configured to perform a control for health index measurement and other necessary controls (the operational modes 200, 210, 220, and 230); and a switch section configured to transmit a switching signal and other signals to each section by a predetermined setting operation (the buttons or touch screen shown as elements 92, 100, etc.; column 16, lines 43-67); where the second control section controls the voltage measuring section, the signal extracting section, and the first control section, causing them to operate and perform a specific control only when the switch section is in a predetermined state (the operational modes are controlled by the control panel, such that the unit is triggered to monitor the power supply).

Regarding claim 3, Schulze discloses an electronic device for health index measurement (elements 12A, 12B) comprising a power supply connected to a power receiving section (column 3, lines 7-15); a voltage measuring section configured to measure a variation in the voltage of the power supplied to the power supply section (column 15, lines 20-25); a signal extracting section configured to analyze the measured voltage variation data and to extract a specific signal contained in the data (the signal being whether or not the voltage threshold is crossed, which can be considered to result in a 1/0 signal); and a control section configured to perform a specific control based on the signal

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extracted by the signal extracting section (column 15, lines 25-27). Schulze further discloses a second control section configured to perform a control for health index measurement and other necessary controls (the four operational modes; column 14 line 17 to column 15 line 9); and at least one switch section configured to transmit a switching signal and other signals to each section by a predetermined setting operation (column 15, lines 10-15); where the first control section performs a kind of control selected from plural kinds of controls when receiving a signal from the signal extracting section (that is, indicating or not indicating low battery status, or initiating low power shutdown), and that the second control section selects and causes to be executed a kind of control to be performed in the first section based on which switch section is operated (that is, choosing which operational mode is used for operation).

Regarding claim 4, Schulze discloses an electronic device for health index measurement (elements 12A, 12B) comprising a power supply connected to a power receiving section (column 3, lines 7-15); a voltage measuring section configured to measure a variation in the voltage of the power supplied to the power supply section (column 15, lines 20-25); a signal extracting section configured to analyze the measured voltage variation data and to extract a specific signal contained in the data (the signal being whether or not the voltage threshold is crossed, which can be considered to result in a 1/0 signal); and a control section configured to perform a specific control based on the signal extracted by the signal extracting section (column 15, lines 25-27). Schulze further discloses a second control system configured to perform a control for

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health index measurement and other necessary functions (element 81); where the second control section is capable of selecting and executing at least one operation mode for the device, functions to operate the voltage measuring section, signal extracting section, and first control section, such that they perform only when a specific operation mode is selected (column 16, lines 25-42).

Regarding claim 5, Schulze discloses an electronic device for health index measurement (elements 12A, 12B) comprising a power supply connected to a power receiving section (column 3, lines 7-15); a voltage measuring section configured to measure a variation in the voltage of the power supplied to the power supply section (column 15, lines 20-25); a signal extracting section configured to analyze the measured voltage variation data and to extract a specific signal contained in the data (the signal being whether or not the voltage threshold is crossed, which can be considered to result in a 1/0 signal); and a control section configured to perform a specific control based on the signal extracted by the signal extracting section (column 15, lines 25-27). Schulze further discloses a second control section configured to perform a control for health index measurement and other necessary controls (column 14, lines 17-19); where the first control section performs a kind of control selected from plural kinds of controls when receiving a signal from the signal extracting section (that is, indicating or not indicating low battery status, or initiating low power shutdown); where the second control section is capable of selecting and executing at least one kind of operation mode for the device (column 14 line 17 to column 15 line 9), and functions to select and have executed a kind of control

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to be performed in the first control section based upon which operation mode is selected (such as in Idle Mode, when all alerts are disarmed).

Regarding claim 6, Schulze further discloses that the signal is given as a time series variation of a power supply voltage within a range that assures normal operation of the device (column 15, lines 20-30).

Regarding claim 7, Schulze further discloses that the plural kinds of specific signals are prepared (that is, varying voltage levels); the control section has plural operation modes corresponding to the plural kinds of signals (that is, normal operation, low battery alert, or automatic power shutdown); and that a specific operation mode is selected and executed corresponding to the kind of extracted signal (column 15, lines 25-27).

Regarding claim 8, Schulze further discloses that the chosen operation mode may comprise function setting (since the operation mode chosen may be normal operation, which would enable the user to set functions of the device).

Regarding claim 11, Schulze further discloses a method comprising connecting a driving power supply to an electronic device for health index management (column 3, lines 7-15); and using the power supply to apply a voltage having a combination of high and low level voltages resulting in a code in order to cause the device to perform a specific action based on the code (that is, the code may be considered to be a combination of 1/0 signals based on the level of voltage, when high voltages result in normal operation, low voltages result in low battery alerts, and extremely low voltages result in automatic power shutdown of the device).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze in view of New (US Patent 6494829).

Regarding claim 9, Schulze discloses all the elements of the current invention, as described above, except for writing the extracted signal into nonvolatile memory as individual information. Schulze further discloses keeping track of battery usage (column 10, lines 46-47), but does not disclose writing voltage status signals to nonvolatile memory.

New teaches an electronic device for health index measurement comprising a signal extracting section that monitors variations in the voltage of a

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power supply, and writing the extracted signal to nonvolatile memory (column 11, lines 54-60), in order to accurately monitor the device's functionality. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the system of Schulze and written the extracted voltage variation signal to nonvolatile memory, as taught by New, in order to accurately monitor the system's functionality.

Regarding claim 10, Schulze discloses all the elements of the current invention, as described above, except for writing the operation program triggered by the extracted signal into nonvolatile memory.

New teaches an electronic device for health index measurement comprising a signal extracting section that monitors variations in the voltage of a power supply, with a memory section for tracking the voltage variations over time (column 11, lines 54-60), in order to monitor the system's performance. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the system of Schulze and recorded executed operations in nonvolatile memory, as taught by New, in order to monitor the system's performance.

The examiner notes that New does not specifically disclose recording the executed operation, rather than the extracted signal. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use choose to track the executed operations, because the Applicant has not disclosed that recording executed operations instead of the signals that trigger the operations provides a particular advantage,

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is for a particular purpose, or solves a stated problem. Moreover, it appears that recording the signals used to trigger operations, per new, or recording the executed operations, per Applicant, would perform equally well to monitor the system's performance. Accordingly, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have modified New such that the memory was used to store executed operations, because such a modification would have been considered a mere design consideration that fails to patentably distinguish over Schulze in view of New.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 5092330 to Duggan, which discloses a similar system and method.

US Patent 4531526 to Genest, which discloses a similar system and method.

US Patent 3690313 to Weppner, which discloses a similar system and method.

US Patent 5865733 to Malinouskas, which discloses a similar system and method.

US Patent 6236888 to Thompson, which discloses a similar system and method.

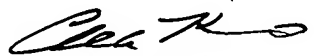
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen E. Toth whose telephone number is 571-272-6824. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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